

LEGEND

- DSD
1 NEW DUCT SMOKE DETECTOR.
- J
J EXISTING FIRE ALARM JUNCTION BOX.
- FAP EXISTING FIRE ALARM CONTROL UNIT.
- NEW 3/4 INCH FIRE ALARM CONDUIT.

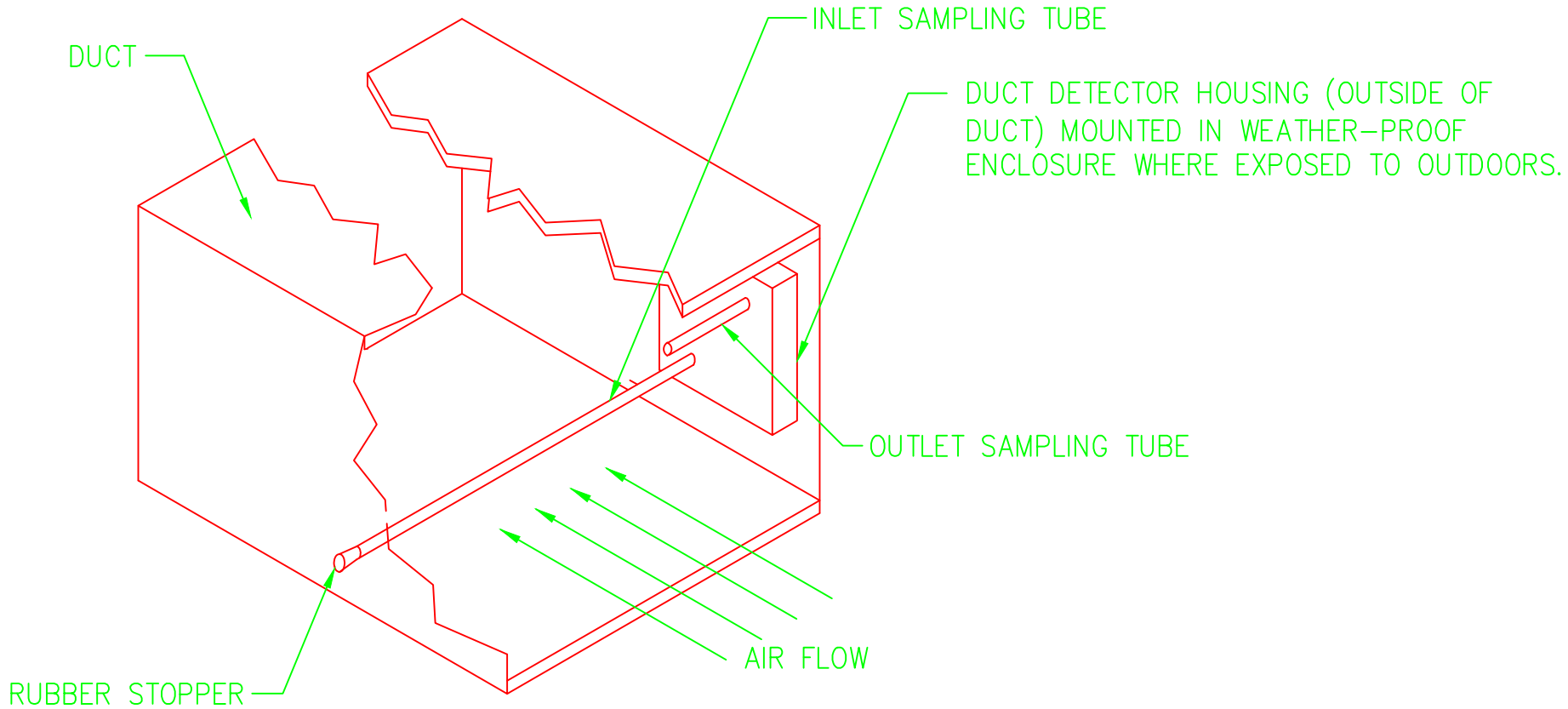
CONDUCTOR IDENTIFICATION LEGEND
4-13 IDC 4#16 INITIATION DEVICE CIRCUIT CONDUCTORS FOR HVAC FAN UNIT #13.
1-13 FSD 1#16 RELAY CIRCUIT CONDUCTOR FOR HVAC FAN UNIT #13 FAN SHUT DOWN.

SEQUENCE OF OPERATIONS

SYSTEM EVENT	RESPONSE						
	ANNUNCIATE EVENT AT FACP	FIRE SIGNAL TO LBNL RECEIVER	SHUT DOWN AHU IN ALARM	OPERATE BUILDING 77 BELL/STROBES	OPERATE UTILITY CENTER BELL/STROBES	TROUBLE SIGNAL TO LBNL RECEIVER	SUPERVISORY SIGNAL TO LBNL RECEIVER
AHU DUCT SMOKE DETECTOR	●	●	●	●	●		
LOSS OF POWER OR TROUBLE	●					●	
SUPERVISORY SWITCH	●						●

NOTE:
THE SEQUENCE OF OPERATIONS ABOVE ADDRESSES ACTIONS AS A RESULT OF THIS PROJECT ONLY (E.G. ALL BUILDING FIRE ALARM FUNCTIONS ARE NOT SHOWN).

TYPICAL DUCT DETECTOR DETAIL



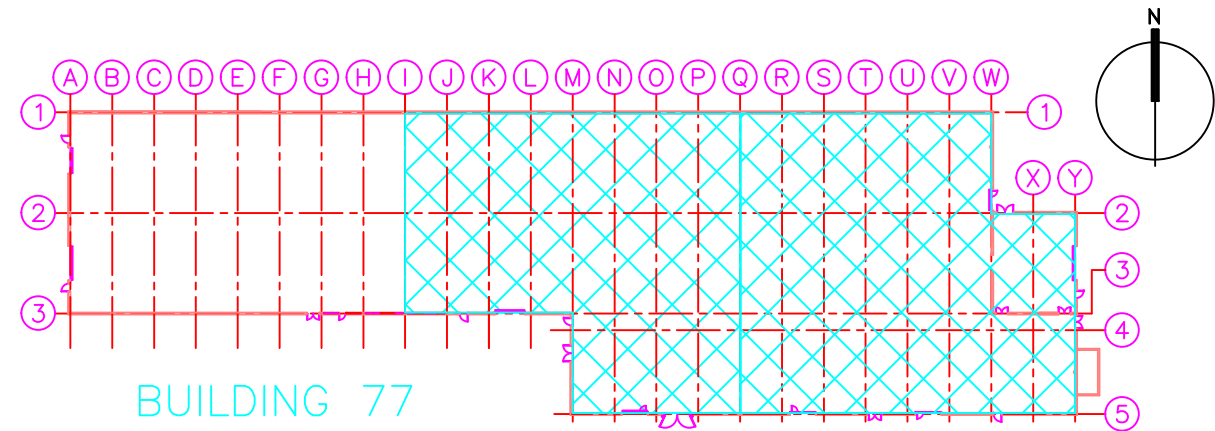
NOTE:
SMOKE DETECTORS MAY ALSO BE MOUNTED ON THE CEILING OF THE HVAC FAN UNIT ENCLOSURE WHERE SIZE PERMITS, WHERE THE DETECTOR IS LISTED FOR THE APPLICATION, AND WHERE IN CAN BE MOUNTED IN ACCORDANCE WITH ITS LISTINGS/APPROVALS AND NFPA 72.

GENERAL NOTES:

IN GENERAL, WORK SHALL INCLUDE, BUT NOT BE LIMITED TO:

- THE DETAILED DESIGN, FABRICATION, PROCUREMENT, AND INSTALLATION OF THE FIRE PROTECTION SYSTEMS ADDITIONS AND MODIFICATIONS AS INDICATED ON THE CONTRACT DRAWINGS.
- INSTALLATION OF NEW CONDUIT, RACEWAY SYSTEM MODIFICATIONS AND RACEWAYS FOR THE FIRE ALARM SYSTEM MODIFICATIONS.
- THE INSTALLATION OF NEW DUCT SMOKE DETECTORS IN THE NEW HVAC FAN UNITS AS SHOWN IN THE DRAWINGS, ALL NECESSARY RACEWAY SYSTEMS (CONDUIT), ZU-35DS MODULES, SM-30 MODULES, SR-35 MODULES, INTERPOSING HVAC FAN SHUTDOWN RELAYS, AND CONDUCTORS NECESSARY FOR THE INSTALLATION AND COMMUNICATION WITH THE EXISTING FACP LOCATED IN THE 1ST FLOOR CLOSET FOR THE FIRE ALARM SYSTEM MODIFICATIONS.
- ALL PENETRATIONS THROUGH WALLS, FLOORS, CEILINGS, AND ROOF NECESSARY FOR THE INSTALLATION OF THE APPLIANCES INCLUDING THE INSTALLATION OF APPROVED FIRESTOP ASSEMBLIES NECESSARY TO MAINTAIN THE DESIGNED FIRE RESISTANCE RATING OF THE WALL, CEILING, OR FLOOR ASSEMBLY.
- SYSTEMS AND DEVICE TESTING.
- THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND IMPLEMENTING ALL SAFETY PROGRAMS AND PROCEDURES FOR THIS PROJECT AND SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- THE CONTRACT DRAWINGS ARE DIAGRAMMATIC ONLY. SUBCONTRACTOR SHALL DETERMINE THE ACTUAL MEASUREMENTS AND MAKE ANY AND ALL SUCH LENGTH AND OFFSET ADJUSTMENTS AS MAY BE NECESSARY TO COMPLETE THE INSTALLATION AT NO CHANGE IN THE CONTRACT PRICE. THE DRAWINGS ARE NOT INTENDED TO RELIEVE THE SUBCONTRACTOR OF ANY RESPONSIBILITY FOR AVOIDING CONFLICTS OR OBSTRUCTIONS, OR FOR INSTALLING THE FIRE ALARM APPLIANCES AS REQUIRED.
- ALL EQUIPMENT SHALL BE NEW, AND APPROVED AND/OR LISTED BY UNDERWRITERS' LABORATORIES OR FACTORY MUTUAL.
- SYSTEM, EQUIPMENT, INSTALLATION, AND MATERIALS AND METHODS USED SHALL COMPLY WITH THE FOLLOWING:
 - THE REQUIREMENTS OF THE LAWRENCE BERKELEY NATIONAL LABORATORY.
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 72 NATIONAL FIRE ALARM CODE, CURRENT EDITION.
 - CALIFORNIA BUILDING AND FIRE CODES, 2007 EDITIONS.
 - MANUFACTURER'S RECOMMENDATIONS AND GUIDELINES.

BUILDING KEY PLAN





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CONSULTING FIRM

PROFESSIONAL SEAL
(IF REVISION, APPLIES ONLY TO REVISED WORK)

RECORD
DRAWING

06/21/10

ISSUE (PROGRESS, ESTIMATE, BID, CONSTRUCTION, CONFORMED, REVISION, RECORD)

REVISION NUMBER	DRAWN BY	CHECKED BY	APPR'D BY	DATE	REMARKS		

BUILDING 77
REHAB. BLDG. STRUCTURE/SYSTEMS PH.2
FIRE ALARM – DETAILS & NOTES

UNIVERSITY OF CALIFORNIA
LAWRENCE BERKELEY NATIONAL LABORATORY
FACILITIES DIVISION

DRAWN BY: DWH
CHECKED BY: BBT
APPROVED BY: —
CAD FILE PATH: TBD
SCALE: AS NOTED

DRAWING NO. 4N77E211
PROJECT NO. TBD

DATE 4/16/09
SHEET FA0.1